A Comparison of Muscular Activity among European, Korea and Malaysian During Seating Using Musculoskeletal Computational Analysis Method

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Sitting is the most common posture in any industry field either in office work, manufacturing or even automotive. Sit for a long time lead to musculoskeletal disorder which causes muscle fatigue. However, different size of people will have a different level of muscle activation. The objective of this paper is to analyse and compare the muscle activation during sitting among European, Korean, and Malaysian. The human size employed for this study is by 95th percentile male. The AnyBody Modelling Software is used to simulate and analyse the human muscle activity of the seating posture of these respective countries. Our finding showed that the trunk of the human body has the highest muscle activity. The Malaysian anthropometry showed the highest muscle activity in sitting posture; followed by Korean and European.

Keywords: Human modelling, AnyBody Modelling Software, Sitting, Muscle Activity